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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/805,265	03/13/2001	Fabrice Marinet	99RO02754212	3196

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EXAMINER

DO. CHAT C

ART UNIT	PAPER NUMBER
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2124

DATE MAILED: 04/20/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

# Office Action Summary

Application No.

09/805,265

Applicant(s)

MARINET, FABRICE

Examiner

Chat C. Do

Art Unit

2124

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 01 March 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 11-44 is/are pending in the application.
- 4a) Of the above-claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 11-14, 20, 23, 25-27, 32-35, 40 and 41 is/are rejected.
- 7) ☒ Claim(s) 15-19, 21, 22, 24, 28-31, 36-39 and 42-44 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date: \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_\_

### DETAILED ACTION

1. This communication is responsive to Amendment B, filed 3/1/2004.
2. Claims 11-44 are pending in this application. Claims 11, 25, 34, and 40 are independent claims. In Amendment B, claim 41 is amended. This action is made final.
3. Claims 1-10 are previously cancelled.

### *Claim Rejections - 35 USC § 102*

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 11-14, 20, 25-27, 32, 34-35, and 40-41 are rejected under 35 U.S.C. 102(b) as being anticipated by Stout (E.P. 0878907A2).

Re claim 11, Stout discloses in Figure 2 a pseudo-random number generator (abstract) comprising: a first generator for generating a sawtooth waveform signal having a first frequency (112); a second generator for generating a pulse signal having a second frequency (116); a sampling circuit connected to first and second generators for sampling the sawtooth waveform signal using the pulse signal for generating a sample signal of the sawtooth waveform at the second frequency (118); and a coding circuit connected to sampling circuit for generating pseudo-random numbers based on the sample signal (124 and 126).

Re claim 12, Stout further discloses in Figure 2 coding circuit codes an amplitude of the sample signal so that the pseudo-random numbers are generated based on the coded amplitude (output of 124).

Re claims 13-14, Stout further discloses in Figure 2 the pseudo-random numbers are output in series or parallel (output of 124).

Re claim 20, Stout further discloses in Figure 2 first generator (112) comprises: a capacitor (122); switching means for switching a current for charging and discharging capacitor; and switching control means for controlling the switching of the current to obtain a succession of charge and discharge cycles of capacitor (122 and 118).

Re claim 25, it has a same limitations cited in claim 12. Thus, claim 25 is also rejected under the same rationale in the rejection of rejected claim 12.

Re claim 26, it has a same limitations cited in claim 13. Thus, claim 26 is also rejected under the same rationale in the rejection of rejected claim 13.

Re claim 27, it has a same limitations cited in claim 14. Thus, claim 27 is also rejected under the same rationale in the rejection of rejected claim 14.

Re claim 32, it has a same limitations cited in claim 20. Thus, claim 32 is also rejected under the same rationale in the rejection of rejected claim 20.

Re claim 34, it has a same limitations cited in claim 20. Thus, claim 34 is also rejected under the same rationale in the rejection of rejected claim 20.

Re claim 35, it has a same limitations cited in claim 12. Thus, claim 35 is also rejected under the same rationale in the rejection of rejected claim 12.

Re claim 40, it is a method claim of claim 11. Thus, claim 40 is also rejected under the same rationale in the rejection of rejected claim 11.

Re claim 41, it is a method claim of claim 12. Thus, claim 41 is also rejected under the same rationale in the rejection of rejected claim 12.

***Claim Rejections - 35 USC § 103***

6. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

7. Claims 23 and 33 are rejected under 35 U.S.C. 103(a) as being obvious over Stout (E.P. No. 0878907A2) in view of Soenen et al. (U.S. 5,961,577).

Re claim 23, Stout does not disclose a second generator comprises a ring oscillator having an odd number of stages. However, Soenen et al. disclose in Figures 1-2 a second generator (22 and 24) comprises a ring oscillator (22) having an odd number of stages (Figure 2). Therefore, it would have been obvious to a person having ordinary skill in the art at the time the invention is made to add a second generator comprises a ring oscillator having an odd number of stages as seen in Soenen et al.'s invention into Stout's invention because it would enable to reduce the circuitry to generate a random signal.

Re claim 33, it has a same limitations cited in claim 23. Thus, claim 33 is also rejected under the same rationale in the rejection of rejected claim 23.

***Allowable Subject Matter***

8. Claims 15-19, 21-22, 24, 28-31, 36-39, and 42-44 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

***Response to Arguments***

9. Applicant's arguments filed 03/01/2004 have been fully considered but they are not persuasive.

a. The applicant argues in page 15 2<sup>nd</sup> paragraph that Stout et al. do not sample the sawtooth waveform signal from the first generator using the pulse signal from the second generator.

The examiner respectfully submits that technically the term "sampling" means taking out sample(s) ("point(s)") from a given input signal by many means. The claim language does not define how to sample the sawtooth waveform. In the cited reference, the second oscillator (116) is generating signal of second frequency and modulating the sawtooth signal which is same as sampling the sawtooth signal to create an random number sequence.

b. The applicant argues in page 15 last paragraph that the sawtooth waveform signal is used for controlling the second frequency of the second generator as cited in col. 2 lines 26-32.

The examiner respectfully submits that the cited reference clearly discloses in the specification col. 2 lines 45-49 the two adjust bits Adj1 and Adj2 are used to adjust the randomness of the random number by dividing with a predetermined ratio. Figure 2 is an improved version of Figure 1 in the cited reference wherein the sampling is taking placed by modulating signal.

### ***Conclusion***

10. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Chat C. Do whose telephone number is (703) 305-5655. The examiner can normally be reached on M => F from 7:00 AM to 4:30 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chaki Kakali can be reached on (703) 305-9662. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Chat C. Do  
Examiner  
Art Unit 2124

April 8, 2004



**TODD INGEBERG**  
**PRIMARY EXAMINER**